

REMARKS

The Applicants appreciate the thorough examination of the subject application and acknowledge withdrawal of the last rejection. By this amendment, changes have been made in certain claims to overcome the Examiner's rejections and more concisely claim and describe the present invention. Claims 15, 18-21 and 24-28 remain in the application for reconsideration by the Examiner. The Applicants submit that the claim amendments in conjunction with the remarks below overcome the disclosures of the cited art. The Examiner's allowance of all pending claims is therefore solicited.

Response to Claim Rejections Under 35 U.S.C. 103(a)

Rejection of Claims 15, 18-21, 24-26 and 28

Claims 15, 18-21, 24-26 and 28 have been rejected under 35 U.S.C. 103(a) as unpatentable over Higgins (U. S. Patent Application Publication 2002/0116505) in view of Ohno (U.S. Patent Application Publication 2003/0161332).

Rejection of Claim 27

Claim 27 has been rejected under 35 U.S.C. 103(a) as unpatentable over Higgins in view of Ohno further in view of Moran (U.S. Patent Application Publication 2003/0083941).

Independent Claim 15

Independent claim 15 has been amended by making certain clarifying amendments to more clearly claim the subject matter the Applicants regard as the invention. These amendments are supported by at least paragraphs [00017] and [00018] and Figure 1 of the application as filed. The Applicants believe the combination of Higgins and Ohno does not render the invention, as set forth in amended claim 15, obvious under Section 103(a).

Higgins relates to a content provider and method for a computer system. The content provider includes a task manager that initiates and manages sessions for a client and queries a server as required for content requested by the client. The content provider further comprises a

protocol adapter to convert between an internal data format of the content provider and a data format of a server.

The Examiner refers to the Higgins elements of media drive interfaces, keyboard, mouse and monitor as connected by an internal bus. He then suggests that these elements disclose the Applicants' automation components connected by a conventional field bus. It is not clear that these elements of a conventional computer system disclose the Applicants' automation components as that phrase is understood in the automation engineering systems industry. Further, it is understood that these automation components are independently operative in the automation system. As further described below, the components that Examiner Jiang has cited as disclosing the Applicants' automation components (e.g., keyboard, mouse) are not independently operative, as they must interact with other elements of the computer system to perform a task or provide a specific computer function. In contrast, the automation components of an automation system provide control and monitoring of process parameters and functions within the automation system.

Examiner Jiang continues by noting that the Higgins content provider system discloses the Applicants' service access unit.

Higgins does not disclose that his content provider system is connected to the field bus as the Applicants claim for their service access unit. Higgins's content provider system is a software element that cannot be connected to a field bus. As the word "connected" is understood in common parlance, it suggests that two components are physically tied together. One of those components cannot be a software element as the term "connected" does not apply to non-hardware elements. Query, what does it mean to "connect" a software element?

To overcome this flaw in the cited art, the Examiner asserts that Higgins's content provider system is stored in a memory of the computer system and the memory is connected to a bus. But the Applicants now claim that their service access unit is directly connected to the field bus and further now claim that the service access unit comprises at least a hardware element. Connecting a memory element storing the content provider system to a bus does not satisfy the Applicants claim language that the service access unit is connected directly to the field bus.

Further, it is not clear that the internal bus to which the Higgins keyboard, mouse, etc. is connected is the same bus that Higgins memory element is connected to. This requirement must be satisfied to meet the Applicants' claim limitations that the automation components are connected to the field bus and the service access unit is directly connected to the field bus.

The Examiner-cited Higgins paragraphs [0036] and [0037] are not helpful on this point. Instead, Higgins Figure 1 reveals a computer system 100 and a CPU 101. One line (bus) extending from the Higgins CPU indicates a connection to a main memory 110 where the content provider system is stored. A second line (bus) extending from the Higgins CPU indicates a connection to an I/O interface 102, and the I/O interface is further connected to a keyboard, printer monitor and mouse. Thus reference to Higgins Figure 1 reveals that in fact, the content provider systems is not connected (where for the sake of this argument it is assumed that the software content provider system can in fact be "connected" to something) to the same bus as the mouse, keyboard, etc are connected to. On this point Higgins fails to disclose the Applicants claim language that the service access unit is connected to the field bus, which is the same bus to which the Higgins "automation components" are connected (assuming again, for the sake of this rebuttal argument, that the Higgins keyboard, mouse, etc., disclose the Applicants' automation components).

The Applicants next claim that the automation components request services and the service access unit requests such services from the communications network. As noted above, the Examiner has cited the media drive interfaces, keyboard, mouse, etc. as the automation components. But Higgins fails to disclose that these elements request services from the communications network. Instead, the Examiner refers to Higgins's paragraph [0039] for the reference to the content provider accepting calendaring and scheduling requests originating from the calendar user application. But the calendar user application is not one of the automation components. Presumably, the Examiner failed to identify the calendar user application as an automation component because the Applicants automation components are physical components and the calendar user application is not. Further, the Applicants automation components are now claimed as hardware components, making the Examiner's citation to the Higgins calendar user application now clearly inapplicable and distinguishable.

The Applicants claim that the automation components communicate with the internet mechanisms of the communication network. But as is known, the mouse, keyboard, etc. do not communicate with internet mechanism. In the Applicants invention as described and claimed, the automation components do in fact communicate with services provided in the communications network, and those services (for example software updates) do then become active in the automation components as they are loaded into the automation components and control operation of the automation components, e.g., the updates become active in the automation components.

The Applicants also claim that the service access unit comprises a search means for addressing the central register database. With regard to this limitation, the Examiner cites to Higgins paragraph [0040]. However, a careful reading of this paragraph does not appear to disclose this claimed feature. Higgins discloses that the content provider system 174A/content provider 170 receives a response from a server 280 and converts this data to an internal binary format suitable for internal purposes. The content provider 170 also monitors server calendar data. But there is no reference to a search means within the Higgins content server. Thus this claimed element of the Applicants' service access unit is not satisfied.

Also, the Examiner cites Higgins paragraph [0040] for "the content provider delivers the target server specific format request to a target server." The Examiner then concludes that Higgins discloses "querying a remote server." The Applicants do not agree that this phrase or the paragraph from which it has been extracted teach querying a remote server. The Applicants claim that the service access unit comprises a search means. While Higgins may disclose delivering a request to a target server, this is not identical to nor does it render obvious the Applicants claim element of a search means for addressing a data base. The Applicants claim searching a data base to locate the information requested by one of the automation components. But Higgins apparently knows the address of a target server from which desired information can be obtained, as Higgins does not disclose a search means and such a search means is not required if the target server address is known.

It is acknowledged that Ohno discloses translating the format of received data from the format of the TCP/IP network from which the data was received to the format of the 1394 bus to

which the data is sent. However, the 1394 network is not necessarily a “field bus” as that term is commonly used in the industry.

Thus for the various reasons set forth above, amended claim 15 is patentable over the Higgins/Ohno combination.

Dependent Claims 18, 19 and 20

Dependent claims 18, 19 and 20 are considered to be in allowable condition due to their dependency from claim 15, which is believed to be allowable for the reasons set forth above. Additionally, claims 18, 19 and 20 set forth other patentable features of the present invention.

Independent Claim 21

Independent claim 21 is a method claim that has been rejected over the same art as claim 15. Claim 21 has therefore been amended in a similar manner to claim 15, e.g., the automation components are now referred to as hardware automation components and the service access unit comprises at least a hardware element. The reasons presented above as to the patentability of claim 15 over the cited art also apply to claim 21. Claim 21 is therefore considered allowable over the cited art.

Dependent Claims 24-27

Dependent claims 24 – 27 are considered to be in allowable condition due to their dependency from claim 21. These claims also set forth other patentable features of the present invention.

Independent claim 28

Independent claim 28 is an apparatus claim that has been rejected over the same art as claim 15. Claim 28 has therefore been amended in a similar manner to claim 15 and the remarks presented above also apply to claim 28. Claim 28 is therefore considered allowable over the cited art.

Conclusion:

Since the proposed amendments overcome the current claim rejections, issuance of a Notice of Allowance for all pending claims is respectfully requested. The Commissioner is hereby authorized to charge any appropriate fees due in connection with this paper, including the fees specified in 37 C.F.R. §§ 1.16 (c), 1.17(a)(1) and 1.20(d), or credit any overpayments to Deposit Account No. 19-2179.

Respectfully submitted,

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